47

SEQUENCE LISTING

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<120> HIGH-THROUGHPUT SCREENING OF EXPRESSED DNA LIBRARIES IN FILAMENTOUS FUNGI

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<140> 09/834,434
<141> 2001-04-13

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Gly Gln Tyr Ile Leu Gly Asp Thr Val Gly Asp Lys Ile Arg Ile Ile
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Ala His Tyr Ser Gln Ser Ile Leu Val His Thr Ala Phe Gly Cys Gly
     50                  55                  60

Val Leu Thr Ser Ser Thr Arg Met Ser Pro Thr Phe Leu Ser Gln Ser
 65                  70                  75                  80

Ile Ile Ala Ser Lys Phe Pro Arg Asn Phe Pro Leu Gln Pro Arg Val
                 85                  90                  95

Tyr Thr Thr Pro Ser Thr Pro Thr Gln Ser Gln Trp Leu Ser Leu Pro
            100                 105                 110

Thr Arg Pro Pro Ser Trp Ser Leu Ser Ser Ala Asn Val Leu Thr Phe
        115                 120                 125

Gly Thr Phe Thr Leu Lys Ser Gly Arg Arg Ala Ser Pro Leu Gln His
    130                 135                 140

Arg His Tyr Arg Asn Arg Lys Thr Tyr His Cys Ile Gln Thr Pro Pro
145                 150                 155                 160

Thr Ser Ser Thr Pro Ala Ser Ser Thr Pro Pro Leu Ser Ser Pro Pro
                165                 170                 175

Ser Pro Pro Trp Pro Thr Pro Ser Ser Pro Ser Ser Leu Arg Thr Leu
            180                 185                 190

Pro Ser Pro Ser Pro Thr Ser Cys Phe Gly Lys Thr Pro Ser Phe Pro
        195                 200                 205

Asn Thr Pro Leu Pro Leu Asn Asn Pro Ile Thr Asn Lys Asn Pro Leu
    210                 215                 220

Asn Ser Pro Ala Tyr Lys Gly Ile Pro Leu Ala Cys Ala Thr Leu Leu
225                 230                 235                 240

Glu Leu Asn Arg Ile Asp Pro Ala Thr Trp Gly Ser Val Ser Tyr Ser
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Tyr Asn Arg Lys Glu Ala Lys Asp His Gly Glu Gly Gly Asn Ile Val
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Gly Gly Lys Val Val Gly Phe Thr Val Ala Leu Asp Arg Leu Glu Lys
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Met Pro Gly Pro Lys Asp Glu Asn Gly Val Glu Asp Asp Lys Pro Arg
                325                 330                 335

Met Ser Ala Met Gly Gln Ile Arg Lys Glu Tyr Gly Val Pro Thr Thr
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Ser Ile Val Thr Leu Asp Asp Leu Ile Lys Leu Met Gln Ala Lys Gly
        355                 360                 365

Asn Glu Ala Asp Met Lys Arg Leu Glu Glu Tyr Arg Ala Lys Tyr Gln
    370                 375                 380

Ala Ser Asp Ser Val Ser Leu Thr Asp Cys Leu Gly Gly Cys Glu Arg
385                 390                 395                 400

Leu Gly Val Val Gly Val Gly Met Lys Ser Cys Ile His Arg Gly Leu
                405                 410                 415

Lys Arg Cys Val Glu Thr Val Val Arg Cys Phe Met Ser Lys Ser Thr
            420                 425                 430

Asn Asp Thr Leu Lys Lys Thr Pro Trp Phe Gln Leu Asn Pro Gly Lys
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Met Leu Gly Thr Pro Val Pro Thr Gln Trp Ala Pro Val Ser His Ile
    450                 455                 460

Ser Gly Arg Arg Leu Phe Gly Gly Cys Gly Leu Glu Arg His Tyr Gly
465                 470                 475                 480

Val Leu Arg Tyr Lys Ala Gly Ala Gly Val Arg Thr Thr Thr Pro Glu
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<213> Aspergillus niger

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Ile Ser Ser Ala Ile Pro Ser Glu Ile Arg Glu Ser His Thr Ile Pro
35 40 45

Lys Ala Tyr Trp Tyr Ile Leu His Ser Ala Ser Ala Gly Cys Leu Pro
50 55 60

His Pro Pro Glu Ala Gln Leu Phe Cys Leu Asn Gln Leu His Pro Asn
65 70 75 80

Ser Pro Ala Thr Ser Pro Ser Asn Pro Val Ser Ile Pro Leu Pro Pro
85 90 95

His Pro His Asn His Asn Gly Ser Pro Cys Leu Gln Asp Arg Leu Pro
100 105 110

Gly Val Ser Arg Arg Pro Thr Cys Leu Ser Ala Pro Ser Pro Ser Arg
115 120 125

Val Ala Val Arg His Pro Ser Asn Thr Gly Ile Ile Ala Ile Gly Arg
130 135 140

Leu Thr Thr Val Tyr Arg Leu Pro Leu Leu Leu Gln Arg Arg His Leu
145 150 155 160

Gln His Arg Leu Ser Pro Leu Arg Pro Leu His His Gly Pro His His
165 170 175

His His Leu Pro Arg Glu Pro Phe His Pro Gln Ala Arg Arg His Ala
180 185 190

Ser Gly Lys Lys Pro Pro Leu Ser Pro Ile Pro His Phe His Ser Thr
195 200 205

Thr His Lys Leu Thr Lys Thr Pro Thr Ala Pro His Thr Lys Ala Ser
210 215 220

Pro Ser Arg Ala Pro Pro Ser Leu Asn Ser Thr Ala Ser Thr Pro Pro
225 230 235 240

Pro Gly Ala Ala Cys Pro Thr Ala Thr Thr Ala Lys Lys Pro Arg Ile
245 250 255

Thr Ala Lys Ala Ala Thr Leu Ser Ala Pro Leu Arg Ala Arg Pro Cys
260 265 270

Leu Ser Thr Met Ser Ser Arg Pro Val Pro Pro Cys Val Arg Pro Ser
275 280 285

Thr Trp Ser Pro Arg Arg Ala Ala Arg Ser Ser Asp Ser Leu Leu Leu
290 295 300

Trp Thr Ala Trp Arg Arg Cys Pro Asp Pro Arg Thr Arg Thr Val Ser
305 310 315 320

Arg Thr Ile Ser Pro Glu Val Leu Trp Val Arg Ser Val Arg Ser Met
325 330 335

Val Cys Pro Arg Arg Val Leu Leu Leu Trp Met Ile Ser Ser Cys Arg
340 345 350

Arg Arg Ala Met Arg Pro Ile Ser Gly Trp Arg Ser Ile Gly Leu Ser
355 360 365

Ile Arg Leu Val Ile Ser Arg Phe His Pro Ile Val Trp Val Gly Val
370 375 380

Arg Gly Val Arg Leu Trp Ala Glu Lys Ala Val Tyr Ile Gly Ala Arg
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Gly Ala Arg Arg Ser Asp Val Leu Cys Gln Asn Leu Glu Gln Met Thr
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Pro Lys Arg Pro Leu Gly Phe Ser Ile Ser Pro Glu Arg Cys Ser Ala
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Arg His Glu Ser Ser Pro Leu Ser Gly His Pro Phe Pro Thr Phe Glu
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Val Ala Asp Ala Tyr Leu Ala Glu Ala Val Ala Trp Lys Gly Thr Met
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Lys Gly Thr Leu Arg Ser Tyr Tyr Tyr Tyr Val Pro Ser Pro Pro
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35 40 45

Arg Thr Leu Phe Pro Lys His Thr Gly Thr Tyr Cys Ile Arg Leu Val
50 55 60

Arg Gly Ala Tyr Leu Ile His Pro Asn Glu Pro Asn Phe Phe Val Ser
65 70 75 80

Ile Asn Asn Cys Ile Gln Ile Pro Pro Gln Leu Pro Pro Pro Thr Pro
85 90 95

Cys Leu Tyr His Ser Leu His Thr His Thr Ile Thr Met Ala Leu Pro
100 105 110

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Ala Tyr Lys Thr Ala Phe Leu Glu Ser Leu Val Gly Gln Arg Ala Asp
        115                 120                 125

Phe Arg His Leu His Pro Glu Val Gly Ser Pro Cys Val Thr Pro Pro
    130                 135                 140

Thr Pro Ala Leu Ser Gln Ser Glu Asp Leu Pro Leu Tyr Thr Asp Ser
145                 150                 155                 160

Pro Tyr Phe Phe Asn Ala Gly Ile Phe Asn Thr Ala Ser Leu Leu Ser
                165                 170                 175

Ala Leu Ser Thr Met Ala His Thr Ile Ile Thr Phe Leu Ala Glu Asn
            180                 185                 190

Pro Ser Ile Pro Lys Pro Asp Val Met Leu Arg Val Lys Asn Pro Leu
        195                 200                 205

Phe Pro Gln Tyr Pro Thr Ser Thr Gln Gln Pro Ile Asn Asn Gln Lys
    210                 215                 220

Pro Pro Lys Gln Pro Arg Ile Gln Arg His Pro Pro Arg Val Arg His
225                 230                 235                 240

Pro Pro Thr Gln Pro His Arg Pro Arg His Leu Gly Gln Arg Val Leu
                245                 250                 255

Gln Leu Gln Pro Gln Arg Ser Gln Gly Ser Arg Arg Arg Arg Gln His
            260                 265                 270

Cys Arg Arg Arg Ser Glu Gly Gln Asp Arg Ala Cys Asp Arg Arg Cys
        275                 280                 285

His His Gly Arg Tyr Arg His Ala Asp Pro Gln Pro Gly Arg Gln Gly
    290                 295                 300

Gly Arg Gln Gly Arg Arg Ile His Cys Cys Ser Gly Pro Leu Gly Glu
305                 310                 315                 320

Asp Ala Arg Thr Gln Gly Arg Glu Arg Cys Arg Gly Arg Ala Gln Asn
                325                 330                 335

Glu Cys Tyr Gly Ser Asp Pro Gly Val Trp Cys Ala His Asp Glu Tyr
            340                 345                 350

Cys Tyr Ser Gly Phe Asp Gln Val Asp Ala Gly Glu Gly Gln Gly Arg
        355                 360                 365

Tyr Glu Ala Val Gly Gly Val Gly Val Ser Gly Leu Val Gly Phe Ile
    370                 375                 380

Asp Arg Leu Phe Gly Trp Val Glu Val Arg Leu Gly Cys Gly Arg Arg
385                 390                 395                 400

Asn Glu Lys Leu Tyr Thr Gly Pro Glu Glu Val Arg Arg Asp Gly Arg
                405                 410                 415
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Glu Met Phe Tyr Val Lys Ile Leu Asn Lys His Leu Lys Lys Asp Pro
            420                 425                 430

Leu Val Ser Ala Glu Leu Ala Arg Lys Asp Ala Arg His Ala Met Ser
        435                 440                 445

Leu Ala His Ser Val Gly Thr Arg Phe Pro His Leu Lys Trp Pro Thr
    450                 455                 460

Leu Ile Trp Leu Arg Leu Trp Pro Gly Lys Ala Leu Trp Arg Ala Ala
465                 470                 475                 480

Val Gln Gly Arg Gly Trp Arg Thr Asn His Asp Ala Arg Arg Glu Leu
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Phe Gly Leu Thr Thr Thr Met Ser Pro Val Asp Pro Pro
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